

I. Amendments to the Claims

This listing of claims replaces without prejudice all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for determining a biopsy location in a body part, the system comprising:

a first device configured to obtain first data about a physiology of the body part, the first data being representable as a digital image;

a second device configured to obtain second data about the body part, the second data being representable as an image;

a monitor coupled to the second device and configured to display the image corresponding to the second data;

a ~~signal processing~~ frame grabber module coupled to the second device, the ~~signal processing frame grabber~~ module being configured to capture the second data from the second device without a need to substantially modify any underlying hardware or software processes in the second device, and the frame grabber module including an analog-to-digital converter configured to digitize the second data;

a memory coupled to the ~~signal processing~~ frame grabber module and to the first device, the memory being configured to store the first data and the digitized second data; and

a computer coupled to the memory and configured to correlate the first data with the digitized second data and to provide a result of the correlation to a user.

2. (Original) The system of claim 1, wherein the computer is further configured to use the result of the correlation to produce a combined image.

3. (Original) The system of claim 2, wherein a determination of a biopsy location is made on the basis of the combined image.

4. (Original) The system of claim 1, further comprising a localization device coupled to the second device, the localization device being configured to enable a selection of a preferred subset of the second data based on the digital image corresponding to the first data.

5. (Original) The system of claim 4, wherein the localization device comprises a computer mouse.

6. (Original) The system of claim 1, wherein the system is configured to use a predetermined spatial coordinate system, and wherein the computer includes a transformer configured to transform at least one of the first data and the digitized second data into the predetermined spatial coordinate system.

7. (Original) The system of claim 1, wherein the second device comprises one of the group consisting of a digital x-ray machine, an x-ray mammography machine, an x-ray cranial axial tomography machine, a magnetic resonance imaging machine, and an ultrasound machine.

8. (Original) The system of claim 1, wherein the first device comprises a positron emission tomography scanner machine.

9. (Currently Amended) A method for determining a biopsy location in a body part, the method comprising the steps of:

obtaining physiological image data about the body part;

obtaining second image data about the body part, the second image data being independent from the physiological image data;

capturing the second image data using frame grabber circuitry without a need to substantially modify any underlying hardware or software processes relating to the step of obtaining second image data;

correlating the second image data with the physiological image data ;

producing a combined set of image data based on the correlating; and

determining a biopsy location based on the combined set of image data.

10. (Original) The method of claim 9, wherein the second image data comprises anatomical image data, and the step of obtaining second image data comprises obtaining anatomical image data using one of the group consisting of a digital x-ray machine, an x-ray mammography

machine, an x-ray cranial axial tomography machine, a magnetic resonance imaging machine, and an ultrasound machine.

11. (Original) The method of claim 9, wherein the step of obtaining physiological image data comprises using a positron emission tomography scanner machine to obtain physiological image data.

12. (Original) The method of claim 9, wherein the step of obtaining physiological image data comprises obtaining digital physiological image data, and the method further comprises the step of digitizing the obtained second image data.

13. (Original) The method of claim 12, further comprising the step of selecting a preferred subset of the obtained second image data based on the obtained digital physiological image data.

14. (Original) The method of claim 13, wherein the step of selecting a preferred subset comprises using a computer mouse to select a preferred subset of the obtained second image data.

15. (Currently Amended) A method for determining a biopsy location in a body part, the method comprising the steps of:

obtaining digital physiological image data about the body part using a first device;

obtaining anatomical image data about the body part using a second device;

capturing the anatomical image data using frame grabber circuitry without a need to substantially modify any underlying hardware or software processes in the second device;

digitizing the captured anatomical image data;
displaying the digitized anatomical image data on a monitor;
selecting a preferred subset of the digitized anatomical data;
correlating the preferred subset of the digitized anatomical image data with the digital physiological image data;
producing a combined set of image data based on the correlating; and
determining a biopsy location based on the combined set of image data.

16. (Original) The method of claim 15, wherein the second device comprises one of the group consisting of a digital x-ray machine, an x-ray mammography machine, an x-ray cranial axial tomography machine, a magnetic resonance imaging machine, and an ultrasound machine.

17. (Original) The method of claim 15, wherein the first device comprises a positron emission tomography scanner machine.

18. (Currently Amended) An apparatus for determining a biopsy location in a body part, the apparatus comprising:

a physiological imaging means for obtaining first data about a physiology of the body part, the first data being representable as a digital image;

a second imaging means for obtaining second data about the body part, the second data being representable as an image;

a monitoring means for displaying the image corresponding to the second data, the monitoring means being coupled to the second imaging means;

a ~~digitizing~~ frame grabbing means for capturing the second data without having substantially modified any underlying hardware or software processes in the second imaging means and for digitizing the second data, the ~~digitizing~~ frame grabbing means being coupled to the second imaging means;

a memory means for storing the first data and the digitized second data, the memory means being coupled to the ~~digitizing~~ frame grabbing means and to the physiological imaging means; and

a correlating means for correlating the first data with the digitized second data and for producing a combined image data set as a result of the correlating, the correlating means being coupled to the memory,

wherein a determination of a biopsy location is made on the basis of the combined image data set.

19. (Original) The apparatus of claim 18, further comprising a localizing means for selecting a preferred subset of the digitized second data based on the digital image corresponding to the first data, the localizing means being coupled to the second imaging means.

20. (Original) The apparatus of claim 18, wherein the apparatus is configured to use a predetermined spatial coordinate system, and wherein the correlating means includes a transforming means for transforming at least one of the first data and the digitized second data into the predetermined spatial coordinate system.

21. (Currently Amended) A system for determining a biopsy location in a body part, the system comprising:

a first device configured to obtain first data about the body part, the first data being representable as a digital image;

a second device configured to obtain second data about the body part, the second data being representable as an image;

a ~~signal processing~~ frame grabbing module coupled to the second device and configured to capture the second data from the second device without having substantially modified any underlying hardware or software processes in the second device and to digitize the second data;

a memory coupled to the ~~signal processing~~ frame grabbing module and to the first device, the memory being configured to store the first data and the digitized second data; and

a computer coupled to the memory and configured to extract information from the digitized second data and display the extracted information in combination with a display of the digital image corresponding to the first data.

22. (Original) The system of claim 21, wherein the computer is further configured to superimpose the extracted information from the digitized second data onto the digital image corresponding to the first data to produce a combined image.

23. (Original) The system of claim 22, wherein a determination of a biopsy location is made on the basis of the combined image.

24. (Original) The system of claim 21, wherein the first data obtained by the first device includes data about a physiology of the body part.

25. (Original) The system of claim 21, wherein the second data obtained by the second device includes anatomical data about the body part.

26. (Original) The system of claim 21, further comprising:

a monitor coupled to the second device and configured to display the image corresponding to the second data; and

a localization device coupled to the second device and configured to enable selection of a preferred subset of the second data based on the digital image corresponding to the first data.

27. (Original) The system of claim 26, wherein the localization device comprises a computer mouse.

28. (Original) The system of claim 21, wherein the system is configured to use a predetermined spatial coordinate system, and wherein the computer includes a transformer configured to transform at least one of the first data and the digitized second data into the predetermined spatial coordinate system.

29. (Original) The system of claim 21, wherein the second device comprises one of the group consisting of a digital x-ray machine, an x-ray mammography machine, an x-ray cranial axial tomography machine, a magnetic resonance imaging machine, and an ultrasound machine.

30. (Original) The system of claim 21, wherein the first device comprises a positron emission tomography scanner machine.

Claims 31-33 (Cancelled).